

DESCRIPTIONS OF NEW SOUTH AMERICAN HESPERIIDÆ (LEPIDOPTERA, RHOPALOCERA)

BY E. L. BELL

FLUSHING, N. Y.

Niconiades reducta new species. (Fig. 1, male genitalia. Type.)

MALE. Upperside. Primaries, brown, six semi-hyaline spots, yellowish, as follows: two discal spots, one each in interspaces 2 and 3, excised on their outer edge; two small spots in the cell, one above the other, a little beyond the center; two minute sub-apical spots in interspaces 6 and 7. Secondaries; same color as primaries, very faint indications of a row of discal spots; a tuft of long brown hairs from the base of the cell, extending to about the center of the wing; inner edge also long-haired.

Beneath. Primaries, brown, paler than above; from vein 2 to inner margin paler than the rest of the wings; a blackish patch from the spot in interspace 2 to the base of the wing; spots of the upper-side repeated. Secondaries, brown, a minute yellowish spot in the cell-end; a band of four discal spots, the lowest much larger than the others, yellowish.

Fringes, fuscous above and beneath. Body; above, thorax, greenish; abdomen, brownish with some green hairs at the base; beneath; thorax with sordid greenish hairs; abdomen, white with a dark line in the center. Legs, brown, striped with yellowish beneath. Head and palpi; above green with a few yellow hairs; beneath, palpi with fuscous and scattered yellowish-white hairs, at the sides fulvous; pectus yellowish-green. Antennae, above, black beneath the upper part of the shaft with the joints minutely marked with yellowish; club and apiculus, yellow with a few dark scales. Stigma reduced to two small round spots, black, one below and touching vein 2 a little beyond its angle, the other directly beneath it on vein I.

Expanse: 42 mm.

Type. Holotype, male, French Guiana; in collection of the author.

The species may not belong in this genus, but from the rather elongate secondaries and general superficial appearance, it will probably be as readily recognized here as any where.

Cobalus cristatus new species. (Fig. 2, male genitalia. Type.)

MALE. Upperside. Primaries, dark brown, with a slight luster; a minute vertical, semi-hyaline streak in interspace 3, about one-third of the distance from the base of the interspace. Secondaries, same color as the primaries; a short, thick tuft of hairs, darker than the ground color of the wing, from

the base of the cell, prominently noticeable; inner margin of the abdominal fold also long haired. Fringes of the primaries fuscous, paler at the tip; of secondaries, whitish.

Beneath. Primaries, cell blackish; costal margin and apical half, somewhat reddish; below vein 2 to inner margin much lighter, almost whitish, but not quite reaching the outer margin; the streak of the upper side repeated and another rather ill-defined streak in interspace 2, about the center. Secondaries, purplish brown, abdominal fold brown. Fringes fuscous.

Body. Above, thorax, green; abdomen, black; beneath, thorax, greenish; abdomen, whitish. Head and palpi, above green, beneath, palpi fuscous and yellow; pectus green. Legs, black above, fulvous beneath. Antennae, above black; beneath, shaft narrowly yellow in the upper two-thirds; club and apiculus yellow. No visible stigma.

Expanse: 34 mm.

Type. Holotype, male, Hansa Humboldt, Santa Catharina, Brazil; in collection of the author.

The form of the valvae resembles that of some of the *Rhithon* species, but the characteristic stigma of that genus is lacking.

Euroto fuldai new species. (Fig. 3, male genitalia. Type.)

MALE. Upperside. Primaries, blackish-brown; two white-hyaline spots in the cell, a little beyond the center; a semi-hyaline, pale yellowish spot on vein I, a little beyond the center and about half the width of the interspace; a small semi-hyaline white spot above the outer corner of the spot just mentioned in interspace I; a large, subquadrate, hyaline, white spot in interspace 2; another smaller one in interspace 3; three sub-apical, white spots, the central one placed inwardly out of line with the other two, the lower two hyaline, the upper spot very small; fulvous scales on the basal half of the costa; greenish-yellow hairs on the basal half of the inner margin. Secondaries, same color as the primaries; a discal band of six, elongate, pale yellowish spots, the upper four of which are better defined than the other two; some greenish-yellow hairs along the edge of the abdominal fold and over the cell. Fringes of primaries fuscous; of secondaries, whitish.

Beneath. Primaries, costal margin at extreme base violaceous, from there to the cell-end oversealed with pale yellowish; apical area and outer margin to vein 2, violaceous with the veins outlined with pale yellow; rest of the wing, black; spots of the upper side repeated; those in interspace I enlarged, coalescent and white. Secondaries, steely, violaceous blue, all of the veins heavily outlined with pale yellow, abdominal fold violaceous-brown; spots of upperside repeated, white, with another spot between the cell-end and the upper angle of the wing, and another in the cell-end. Fringes, of primaries paler than above and darkened at the end of the veins, sordid whitish at the anal angle; of the secondaries, whitish.

Body. Thorax, above with yellowish-brown hairs; abdomen, black; beneath, thorax white; abdomen yellow. Legs yellow, thighs with white hairs. Head and palpi, above yellow and black; beneath, palpi whitish. Antennae missing.

Stigma, a triangular patch filling the angle at the rise of vein 2, slightly longer on the median vein than on vein 2; a stripe immediately below vein 2.

Expanse: 32 mm.

Type. Holotype, male, Simiti, Colombia, July 2, 1929; in collection of the author.

Named for Mr. Oscar Fulda, of New York City, who collected the specimen.

Mnasitheus badius new species. (Fig. 4, male genitalia. Type.)

MALE. Upperside. Primaries, brown, immaculate. Secondaries, same as the primaries. Fringes of both wings brown, paler at the anal angle of each wing.

Beneath. Primaries, brown, paler than above, from vein 2 to inner margin paler than the rest of the wing. Secondaries, darker than the primaries, with a somewhat reddish tinge, except the abdominal fold which is pale brown.

Body. Thorax and abdomen, above and beneath brown. Head and palpi, above brown; palpi beneath brown, with some of the hairs pale tipped. Legs brown. Antennae missing.

The stigma consists of an indistinct narrow line on the underside of vein 2, near its base; a slightly heavier line beneath it on vein 1, also indistinct.

Expanse: 36 mm.

Type. Holotype, male, Santa Cruz, Bolivia; in collection of the author.

Prenes vala race *immaculata* new race.

MALE. Upperside, differs from *vala* Mabille in the primaries being devoid of the discal, cellular and sub-apical spots.

Beneath, the primaries have a faint suggestion of these spots; the streak in interspace I, which is white in *vala*, is in this form pale brown. Secondaries, the curved discal band of spots and the cellular spot are also faint. The ground color of the secondaries is darker than typical *vala*.

The fringes, the palpi and abdomen beneath, are darker than in *vala*.

The form of the genitalia is identically the same as the Biologia Centrali-Americana figure of the genitalia of *vala* (Plate 96, figure 18).

Type. Holotype, male, Blumenau, Santa Catharina, Brazil, March; paratype, male, Manicore, Brazil, August; in collection of the author.

These specimens have been unidentified in the collection of the author for several years, and as they present so different an appearance superficially from *vala*, that it would hardly be suspected that they were in reality so closely allied to that species, it seems fitting to distinguish the race by a special designation in order to call attention to the fact of its existence.

Phlebodes simplex new species. (Fig. 5, male genitalia. Paratype.)

MALE. Upperside. Primaries, dark brown, a few paler scales indicate discal spots in interspaces 2 and 3, and sub-apical spots in 6, 7, and 8, all of these are very faint. Secondaries, immaculate, dark brown.

Beneath. Primaries, dark brown, a little paler than above; spots of upperside repeated a little more distinctly. Secondaries, basal half of the wing violaceous brown, this area bordered outwardly from the abdominal-fold to the costal margin by a semi-circular row of pale spots; a small pale spot in the cell-end; all the rest of the wing is dark brown.

Body. Thorax and abdomen, above and beneath, and legs, dark brown. Head and palpi, above and beneath, dark brown. Antennae, above black, beneath, shaft black, club and apiculus brownish-yellow.

The stigma consists of a somewhat triangular part near the base of interspace 2, the longest side on the median vein, reaching about the middle of that segment, a small roundish piece just below vein 2, and a narrow streak extending upward from vein I, near its center, slanting outward to the outer edge of the small spot below vein 2.

Expanse: 32 mm.

Type. Holotype, male, Blumenau, Santa Catharina, Brazil, November; paratype, male, Mubevo, Paraguay, December; in collection of the author.

This may not belong in the Genus *Phlebodes*, but it seems to fit here better than elsewhere.

Vorates steinbachi new species. (Fig. 6, male genitalia. Type.)

MALE. Upperside. Primaries, blackish brown, basal two-thirds of the costal margin sprinkled with orange-yellow scales; a short ill-defined stripe of the same color in the base of the cell, on the median vein; another similar one in the upper part of the cell, near the end; an oblique discal row of similarly colored, narrow and uneven spots in cells I, 2, 3, and 4; and four sub-apical spots, of the same color, those in interspaces 5, 6, and 7 placed in an outwardly, very slanting row, the fourth, in interspace 8 placed out of line towards the apex. Secondaries, same color as primaries; discal area and inner edge of abdominal fold with fulvous hairs; a collection of pale fulvous scales just beyond the end of the cell, noticeable but not forming a defined spot. Fringes of primaries fuscous above vein 2, from there to

anal angle orange-yellow; of secondaries, fuscous with some orange-yellow scales intermixed. Beneath. Primaries, black, a yellow line from the base to the apex, just inside the coastal edge; a yellow streak in the center of the cell; another in the upper part of the cell, near the end; the discal and sub-apical spots of the upper side are repeated, except that in interspace I is absent; the outer margin narrowly yellow from the apex to vein 2, and this color is extended along veins 3, 4, 5, 6, 7, and 8. Secondaries, blackish-brown, all of the veins heavily outlined with yellow. Fringes as above.

Body; thorax and abdomen blackish-brown above, with some fulvous scales; beneath sordid yellowish, abdomen with a dark central line; pectus greenish-yellow. Head and palpi, above black and yellow, palpi beneath, yellow and dark brown. Legs, brown above; fulvous beneath. Antennæ, above black; beneath, yellow at the joints, club and apiculus yellow. The stigma consists of an angular part between veins 2 and 3, a narrow stripe along the median to the rise of vein 3, and a shorter stripe on the upper side of vein 2; another stripe immediately below vein 2.

Expanse: 30 mm.

Type. Holotype, male, Cochabamba, Bolivia, in collection of the author.

Named for Mr. Jose Steinbach, of Santa Cruz, Bolivia.

Mnaseas inca new species. (Fig. 7, valve of male genitalia. Type.)

MALE. Upperside. Primaries, brownish, becoming almost black basally; scattered yellowish-brown scales in the apical area and along the outer margin to vein 2; a hazy spot in the lower cell-end and one each in interspaces 2, 3, 4, 5, 6, and 7, forming a bent row around the cell-end, all yellowish-brown and ill-defined. Secondaries, same color as primaries and dark at the base. Fringes of both wings pale brown with a dark line at the base.

Beneath. Primaries, paler than above, with a ferruginous tinge, blackish toward the base below the cell; discal and sub-apical spots of the upper side repeated, and one more in interspace 8, all yellowish and brighter than above; the spot in the cell absent. Secondaries, ferruginous; a curved band of pale and ill-defined spots in the disc. Fringes as above, but the dark basal line is not so pronounced.

Body; thorax above brownish with some yellow scales, abdomen brownish; beneath ferruginous. Head and palpi, above brown mixed with yellow, palpi beneath, yellowish-white mixed with black, at the sides ferruginous. Antennæ missing. The stigma is a narrow gray line slanting inwardly across interspace 2 from near the rise of vein 3, and continued very indistinctly across interspace I to vein I.

Expanse: 30 mm.

Type. Holotype, male, Santa Cruz, Bolivia, in collection of the author.

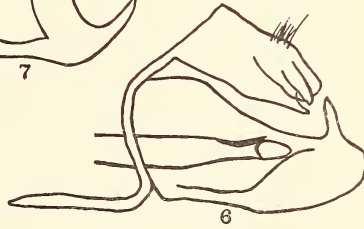
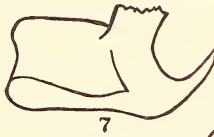
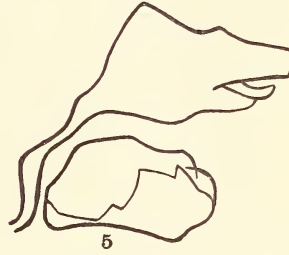
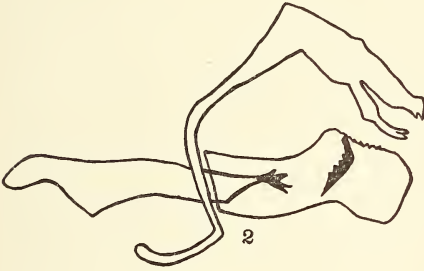
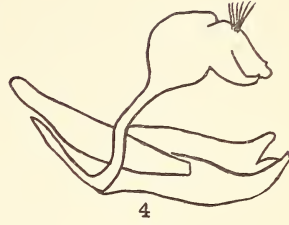
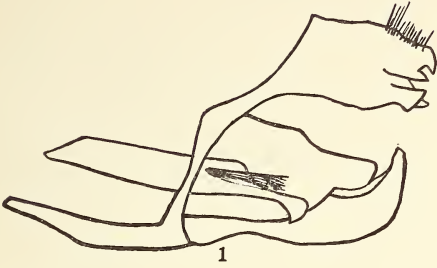
Unfortunately the genitalia were broken in preparation, and only the valve is figured; the form is very similar to that of *bicolor* Mabille. It may be a race of *bicolor*.

All measurements of expanse are from the center of the thorax to the apex $\times 2$.

PLATE XXXI

Male genitalia

- Figure 1. *Niconiades reducta* Bell. Type.
- Figure 2. *Cobalus cristatus* Bell. Type.
- Figure 3. *Euroto fuldai* Bell. Type.
- Figure 4. *Mnasitheus badius* Bell. Type.
- Figure 5. *Phlebodes simplex* Bell. Paratype.
- Figure 6. *Vorates steinbachi* Bell. Type.
- Figure 7. *Mnascas inca* Bell. Type.



HESPERIIDÆ